The Role of a Gastroenterologist in the Diagnosis and Management of Pancreatic Cancer

Sarah Jowett, Consultant Gastroenterologist
Bradford Teaching Hospitals Trust
Leeds Regional Study Day, 12 September 2018
- Recognising symptoms
- Appropriate investigations for diagnosis and staging
- MDT
- Symptom management
Case history

- Mr H, 60 year old joiner
- Presented to acute surgical unit with 2 days of jaundice, pale stools and dark urine
- Had had a bloating type abdominal pain for a few days
- No weight loss

- PMH- angina, MI, triple bypass, peripheral vascular disease and stents
- Bottle wine per night, ex smoker
- Bilirubin 97 (normal <21)
  ALT 424 (normal <45)
  ALP 315 (normal <101)
  amylase 264 (normal <110)

- USS confirmed obstructive jaundice with bile duct dilatation and gallstones in the gallbladder. Pancreas not seen.

- Working diagnosis: bile duct stones
- Plan: for MRCP
Does this presentation fulfil the criteria for referral for suspected cancer?

- Suspected cancer recognition and referral
  NICE June 2015 (NG12)
NICE: 2WW referral guidelines

- aged 40 and over and have jaundice
- aged 60 and over with weight loss and any of the following:
  - diarrhoea
  - back pain
  - abdominal pain
  - nausea
  - vomiting
  - constipation
  - new-onset diabetes.
Mr H

- Pancreatic cancer should be in the differential but the history, blood results and USS findings point more towards gallstones.....

- MRCP next test
MRCP report

- Gallstones in the gallbladder with biliary dilatation and the impression of a short supra pancreatic stricture. Atrophic pancreas as described and appearances could be secondary to chronic pancreatitis.
- Evaluation at EUS/ERCP recommended of the distal CBD in view of deranged LFTs.
Together, putting patients first
- Differential diagnosis
  1. Chronic pancreatitis
  2. Gallstones
  3. Pancreatic cancer
- ERCP requested
- Failed ..... ampulla tethered and abnormal

**Was this the right thing to do?**

- Pancreatic cancer in adults: diagnosis and management NICE Feb 2018 (NG85)
NICE: Investigations

- Pancreatic CT
  - Highly sensitive - good at ruling out disease if negative
  - Lower specificity – may have false positives
- If diagnosis not clear, two options
  - PET CT
  - Or Endoscopic Ultrasound (EUS) with FNA

- Ca19-9 is **not** helpful if jaundiced
- **PET CT**
  - UK based randomized controlled trial 2018
  - Multicentre
  - High negative predictive value
  - COULD also add info about metastases
  - Recommended for all cancers where disease is localized and treatment planned

- **EUS FNA**
  - High sensitivity, lower specificity but FNA increases the specificity, so very low false positive rate for cancer when histology taken
Mr H

- EUS was requested
- Whole pancreas was abnormal with changes consistent with chronic pancreatitis but head was bulky and there was double duct dilatation (bile duct and pancreatic duct)

- EUS FNA diagnosed pancreatic cancer
Together, putting patients first
Mr H, next steps

- CT pancreas (including chest, abdomen and pelvis) confirms diagnosis of 3cm pancreatic head mass without vascular invasion but concern for 2 liver metastases
Liver metastases confirmed on MRI
NICE: Staging

- CT is backbone of staging
- EUS may improve T staging
  - Both EUS and CT overstaged in 7% in one study
  - Understaged in 4% (EUS) and 33% (CT) but rate for EUS was 37% in another study
- EUS may improve N staging
  - Rarely alters management
Other investigations may be required

- Completion of staging with CT chest, abdomen and pelvis
- MRI if liver metastases suspected
- EUS may clarify T and N staging
- Laparoscopy if suspected peritoneal disease
Mr H

- Still jaundiced, fatigued and itchy.
- Loosing weight in hospital
- 2nd attempt at ERCP to achieve biliary drainage with a metal stent fails
NICE: Biliary drainage

- ERCP and metal stent preferable over surgery
- But consider bypass surgery if tumour found to be unresectable during planned Whipples
- IF ERCP not possible
  - Percutaneous transhepatic biliary drainage or EUS guided biliary drainage, both allow placement of metal stents.
  - Similar outcomes and morbidity in RCT
  - Availability variable, PTC outcomes variable
Mr H

- Transferred from Bradford to Leeds for EUS guided choledochoduodenotomy and stent
- Jaundice resolved
NICE: MDT

- Mandated
- My role representing the patient
- Ensuring correct information available to make the right decisions
Mr H

- Informed of diagnosis
- Wanted to know prognosis
- Discussed treatment options, but elected subsequently not to have palliative chemotherapy but to “collect memories” by travelling
- Early referral to palliative services to facilitate his wish to remain as well as possible for as long as possible
NICE: Symptom management

- Pain
  - Analgesic ladder
  - Coeliac plexus block (neurolysis)- EUS or image guided

- Jaundice causes fatigue, malaise and itch
  - ERCP and stent favoured over bypass surgery
  - Endoscopic and percutaneous drainage options
- Malnutrition, loss of appetite, nausea and bloating
  - Pancreatic enzymes
  - Correct timing and dose
  - Consider gastric outlet obstruction
- Psychological factors
  - Anxiety and depression common
  - Access to reliable health information
  - Access to support - CNS
- End of life care
Gastric outlet obstruction

- Surgery or stent, choice dependent on prognosis
  - 1 RCT comparing the two, favoured stent but population excluded people who were unfit for surgery
  - Trend suggesting stents better in the short term and surgery in long term
When to offer ERCP

- If jaundiced and pancreatic cancer diagnosis not established especially if frail or deeply jaundiced.
- If jaundiced and tumour resectable but patient not fit enough for surgery, ERCP and stent as a bridge to potential surgery.
- If jaundiced and unresectable cancer to relief symptoms (better than bypass for Quality of Life).
What to offer at ERCP

- Always take cytology (although only diagnostic in 50% cases)
- Use metal stent (SEMS) rather than plastic ones
- Use a fully covered metal stent if it may need to be removed (eg diagnosis not certain)
When not to ERCP

- Straight to surgery if patient jaundiced but tumour resectable and patient is fit enough

When to offer EUS

- For diagnosis (with FNA) better yield if done before ERCP and stent
- Occasionally for additional staging information
- For biliary drainage if ERCP has failed, equivalent to PTC
- Mr H demonstrates that patients don’t always follow a straightforward pathway
- CT pancreas is a key diagnostic tool
- PET-CT has recently been shown to also have an emerging role in diagnosis and staging (for those considering treatment)
- A gastroenterologist is in a key position to make sure the patient gets the right intervention at the right time
NICE: Managing Inherited Risk

- Surveillance should be **offered** for
  - Hereditary pancreatitis with PRSS1 mutation
  - BRCA1, BRCA2, PALB2 or CVKN2A mutations PLUS at least one first degree relative (FDR) with pancreatic cancer
  - Peutz Jegher syndrome

- Surveillance should be **considered** for
  - Lynch syndrome if there is a FDR with pancreatic cancer
  - 2 or more FDR over at least 2 generations
  - MRI or EUS (Not hereditary pancreatitis)